In the Claims

Please amend claims 17, 26 and 27 as follows.

1-16. (Canceled).

- 17. (Currently Amended) A method for isolating and purifying nucleic acids and/or oligonucleotides from a biological sample, said method comprising:
 - (a) disrupting the biological sample;
 - (b) optionally removing protein and insoluble components from said disrupted sample, leaving a residue;
 - (c) adding an aqueous solution of potassium acetate to said residue sample and subsequently separating non-soluble components from the aqueous solution;
 - (d) mixing said aqueous solution of potassium acetate from which non-soluble components have been separated with an alcoholic solution containing a detergent;
 - (e) incubating said mixed solution;
 - (f) obtaining the supernatant of said mixed solution;
 - (g) contacting and incubating said supernatant with a silicon dioxide support material to produce a silicon dioxide bound fraction and a soluble fraction; and
 - (h) isolating purified nucleic acids and/or oligonucleotides from said soluble fraction.
- 18. (Previously Presented) The method as claimed in claim 17, wherein said alcoholic solution comprises isopropanol and an ionic detergent.

- 19. (Previously Presented) The method as claimed in claim 17, wherein said
- alcoholic solution comprises at least one ionic detergent at a concentration of 0.5 % to 10% (w/v) in 100 % strength alcohol.
- 20. (Previously Presented) The method as claimed in claim 17, wherein said aqueous solution of potassium acetate of step (c) comprises 1 M to 6 M potassium acetate.
- 21. (Previously Presented) The method as claimed in claim 20, wherein said aqueous solution of potassium acetate of step (c) comprises 2 M to 4 M potassium acetate.
- 22. (Previously Presented) The method as claimed in claim 17, wherein said silicon dioxide support material is a suspension of silicon dioxide or silica gel.
- 23. (Previously Presented) The method as claimed in claim 17, wherein said silicon dioxide support material is washed at least once with acetone after step (g) and prior to step (h).
- 24. (Previously Presented) The method as claimed in claim 17, wherein said purified nucleic acids and/or oligonucleotides of step (h) contain less than 100 $\text{U}/\mu\text{g}$ endotoxin.
- 25. (Previously Presented) The method as claimed in claim 24, wherein said purified nucleic acids and/or oligonucleotides of step (h) contain less than 10 $U/\mu g$ plasmid DNA endotoxin.

- 26. (Currently Amended) A method of transfecting eukaryotic or prokaryotic cells with nucleic acids or oligonucleotides, said method comprising:
 - (a) isolating and purifying nucleic acids and/or oligonucleotides from a biological sample by the steps of:
 - (1) disrupting the biological sample;
 - (2) optionally removing protein and insoluble components from said disrupted sample, leaving a residue;
 - (3) adding an aqueous solution of potassium acetate to said residue <u>sample</u> and subsequently separating non-soluble components from the aqueous solution;
 - (4) mixing said aqueous solution of potassium acetate from which non-soluble components have been separated with an alcoholic solution containing a detergent;
 - (5) incubating said mixed solution;
 - (6) obtaining the supernatant of said mixed solution;
 - (7) contacting and incubating said supernatant with a silicon dioxide support material to produce a silicon dioxide bound fraction and a soluble fraction; and
 - (8) isolating purified nucleic acids and/or oligonucleotides from said soluble fraction, and
 - (b) transfecting said cells with said purified nucleic acids and/or oligonucleotides.
- 27. (Currently Amended) A method of producing a purified nucleic acid and/or oligonucleotide composition suitable for use in the treatment of genetic disorders, said method comprising

isolating and purifying nucleic acids and/or oligonucleotides from a biological sample by the steps of:

- (a) disrupting the biological sample;
- (b) <u>optionally</u> removing protein and insoluble components from said disrupted sample, <u>leaving a residue</u>;
- (c) adding an aqueous solution of potassium acetate to said residue sample and subsequently separating non-soluble components from the aqueous solution;
- (d) mixing said aqueous solution of potassium acetate from which non-soluble components have been separated with an alcoholic solution containing a detergent;
- (e) incubating said mixed solution;
- (f) obtaining the supernatant of said mixed solution;
- (g) contacting and incubating said supernatant with a silicon dioxide support material to produce a silicon dioxide bound fraction and a soluble fraction; and
- (h) isolating purified nucleic acids and/or oligonucleotides from said soluble fraction.
- 28. (Previously Presented) A kit comprising:
 - (a) at least one solution suitable for the disruption of a biological sample;
 - (b) an aqueous potassium acetate solution;
 - (c) an alcohol solution optionally also comprising a detergent; and
 - (d) a silicon dioxide support material.
- 29. (Previously Presented) The kit as claimed in claim 28, comprising:
 - (a) a solution suitable for alkaline lysis of biological sample material;



U.S. Application No. 09/890,202 Inventor: Stefan GRIMM, et al. Filed: November 5, 2001 Page 6

- (b) a salt solution containing 1 M to 6 M potassium acetate;
- (c) an alcohol solution containing 0.5 % to 10% (w/v) SDS in 100 % strength isopropanol; and
- (d) a silicon dioxide support material.
- 30. (Previously Presented) The kit as claimed in claim 28, wherein said silicon dioxide support material is a suspension of silicon dioxide or silica gel.